

Election/Restrictions

1. Applicant's election without traverse of Claims 1-8 and 14-18 in the reply filed on April 7, 2008 is acknowledged.
2. Claims 1-18 are pending in the application. Claims 9-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Examiner Note

3. The recitation of "*decreasing nitrogen volatilization*" or "*decreased fertilizer dust*" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the **purpose** of a process or the **intended use** of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 2-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 2-3 recite limitations which lack written description.

The claimed subject matter should be incorporated into the Applicants' specification. Note that incorporation of claimed subject matter does not constitute new matter.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-8, 14-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-10, 15 of U.S. Patent No. 6596831. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to methods of coating fertilizer with the same polymers.

8. Claims 1, 5-8, 14-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 38 of U.S. Patent No. 6818039. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to methods of coating fertilizer with the same polymers.

9. Claims 1-8, 14-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 11-16 of U.S. Patent No. 6706837. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to methods of coating fertilizer with the same polymers.

10. Claims 1-8, 14-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, 8, 10-13, 15, 16, 22, 24, 26, 29, 30,32 of U.S. Patent No. 6756461. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to methods of coating fertilizer with the same polymers.

11. Claims 1, 5-8, 14-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6515091. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to methods of coating fertilizer with the same polymers.

The recitation of "*increasing the abrasion resistance of solid fertilizer*" has not been given patentable weight because the recitation occurs in the preamble that merely recites the **purpose** of a process or the **intended use** of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, 4, 8, 14, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Luthra et al (US 5,652,196).

Luthra et al discloses a method of coating a fertilizer, e.g. nitrogen containing fertilizer (See column 4, line 22) with a polymer (See column 5, lines 20-23) prepared from unsaturated crotonic acid, fumaric acid and **itaconic acid** (claimed recurring C moieties), salt or esters thereof (See column 7, lines 25-28).

It is the Examiner's position that a coated fertilizer has decreased nitrogen volatilization or decreased fertilizer dust *inherently* since the process of Knorre et al is substantially identical to that of claimed invention.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 4-8, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knorre et al (US 3980593).

Knorre et al discloses a method of coating a fertilizer salt (See column 7, lines 54-55) with a polycarboxylate type anticaking agent comprising a hydrophilizing active component (See column 2, lines 16-17) such as homo and copolymers of **maleic acid** (e.g. styrene-maleic acid copolymer) or other unsaturated di and polycarboxylic acid, for example **itaconic acid** (claimed recurring C moieties) or their corresponding salts (See column 4, lines 38-45).

It is the Examiner's position that the fertilizer includes any type of fertilizer including nitrogen containing fertilizer since Knorre et al does not limit its teaching to a particular fertilizer.

It is the Examiner's position that a coated fertilizer would have decreased nitrogen volatilization or decreased fertilizer dust inherently since the process of Knorre et al is substantially identical to that of claimed invention.

As to claims 5-7, 15, 17, 18, Knorre et al fails to teach claimed concentration limitations. However, it is held that concentration limitations are obvious absent a showing of criticality. *Akzo v. E.I. du Pont de Nemours 1 USPQ 2d 1704 (Fed. Cir. 1987).* It would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum values of the relevant concentration parameters (including those of claimed invention) in Knorre et al through routine experimentation depending on particular application in the absence of a showing of criticality.

16. Claims 2, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luthra et al in view of Hedrick et al (US 2,625,529) or Knorre et al in view of Hedrick et al.

Luthra et al/Knorre et al are applied here for the same reasons as above. Luthra et al/Knorre et al fail to teach that the salt is calcium salt (Claim 2) or monocalcium salt (Claim 3).

Hedrick et al teaches that soils can be greatly improved by the addition of traces of polymeric water-soluble polyelectrolytes (See column 3, lines 45-59) such as copolymers containing alkaline earth metal salts of maleic acid, fumaric acid, and itaconic acid (See column 3, lines 60-68), e.g. **calcium or monocalcium** salt of the acids (See column 4, lines 17-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used calcium or monocalcium salt of acids in Luthra et al/Knorre et al with the expectation of providing the desired improved soil, as taught by Hedrick et al.

17. Claims 5-7, 15, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luthra et al.

Luthra et al is applied here for the same reasons as above. Luthra et al fails to teach claimed concentration limitations. However, it is held that concentration limitations are obvious absent a showing of criticality. *Akzo v. E.I. du Pont de Nemours* 1 USPQ 2d 1704 (Fed. Cir. 1987). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum values of the relevant concentration parameters (including those of claimed invention) in Luthra et al through routine experimentation depending on particular application in the absence of a showing of criticality.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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